

**RK267X Series**

**Hipot Tester**

**Instruction Manual**

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HK LEE HING INDUSTRY CO., LIMITED

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## I、General description.

MEIRUIKE RK267 series voltage withstand test instruments are for general- purpose HV test operation, It can be widely used for voltage withstand test in electrician's assistant instrument、rubber-wooden facility、voltage convertor、wires、power meter、motor、power supply plug、cables and all kinds of electronic and electric products. As the launch of the national security standard, Voltage withstand instrument has become one of necessary withstand test instruments to the radio and electronic products manufacturer.

Operating request: environmental temperature 0~40℃

relative humidity  $\leq 75\%$

## II、Main technic index.

INDEX ITEM	MODEL		MODEL		MODEL		MODEL		
	RK2670A	RK2671A	RK2671C	RK2672C	RK2678A	RK2674A	RK2672A	RK2671B	
OUTPUT VOL. (DIGITAL DISP.) (kV)	AC:0~5 DC:0~5	AC:0~5/10 DC:0~5/10	AC:0~5/10 DC:0~5/10	AC:0~5; DC:0~5	AC:0~7.5/15 DC:0~7.5/15	AC:0~20 DC:0~20	AC:0~5 DC:0~5	AC:0~5/10 DC:0~5/10	AC:0~20/30 DC:0~20/30
LEAK.CURR (DIGITAL DISP.) (mA)	AC:0~2/20 DC:0~2/10	AC:0~2/20 DC:0~2/10	AC:0~2/20/100 DC:0~2/20	AC:0~2/20/100 DC:0~2/20	AC:0~2/20 DC:0~2/10	AC:0~2/20 DC:0~2/10	AC:0~2/20 DC:0~2/10	AC:0~2/20/50 DC:0~2/20	AC:0~2/20 DC:0~2/10
OUTPUT PWR	100VA	200VA 500VA	1000VA	500VA	300VA 500VA	400VA 600VA			
OUTPUT WAVE	AC 50Hz SINE WAVE								
V PRECISION	±5%								
A PRECISION	±5%								
TIMINGRANGE (DIGITAL DISP.)	1~99 min ±5% Manual test (71B of 1~999 min ±5%)								
MEAS.	320×260×180	380×280×190	380×200×500	380×280×190	440×350×240	380×200×500			
WG	7Kg	15 Kg 25 Kg	35 Kg	15 Kg	20 Kg	35 Kg			
POWER SUPPLY	AC 220V ±10% 50Hz ±2Hz								
DISSIPATION	≤30W(STATIC DISSIPATION)								

### III、 Pre-used caution.

Read the following items carefully before operating RK267 series voltage withstand test instrument

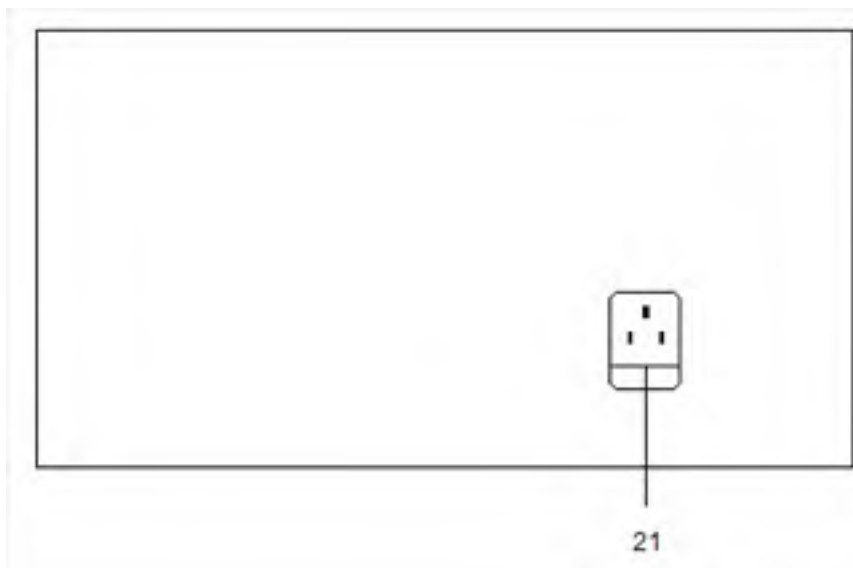
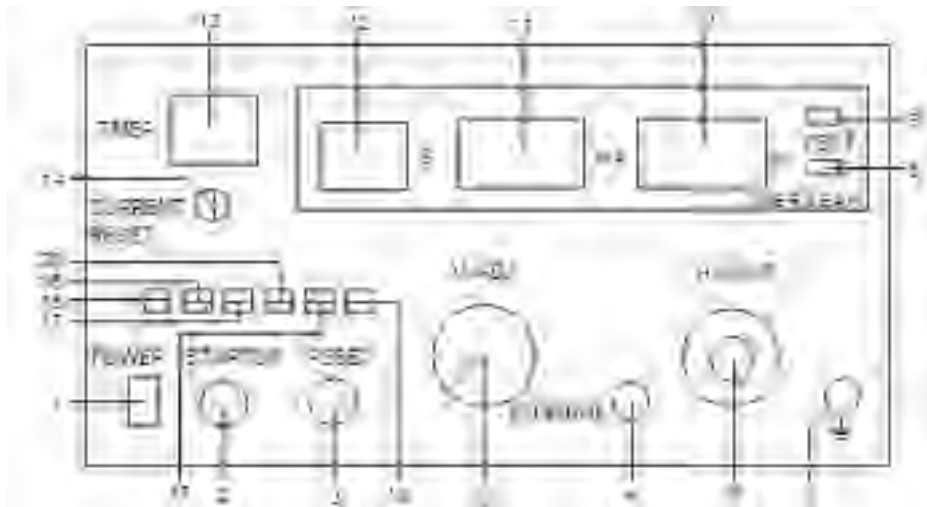
- (11) Use three-hole power supply plug and insure GND connection well.
- (12) GND port and power supply GND port should be connected well
- (13) Wear insulation glove, stand on insulation mat
- (14) Anti-clockwisely circumvolve “V-ADJ” rotary switch to the maximum before turn on test instrument.
- (15) Before preset all functions, reset instrument
- (16) Don't connect test port and test wire when doing test
- (17) Don't connect HV output port with shield box or GND wire to avoid instrument damage.
- (18) Turn off power when accident take place
- (19) Examine and repair when Indicator or annunciator is out of function
- (20) Operate carefully to avoid hazard when take the remote test.

### IV、 Explain (as the front panel)

- (1) Power switch: to control all power supply
- (2) “START” switch: when press down the button, instrument will renew to waiting-test status with the light working.
- (3) “RESET” SWITCH: press down the button means no HV output
- (4) Manual port: remote control test port
- (5) “V-ADJ” rotary switch: adjust test voltage
- (6) HV<sub>OUT</sub> port: test voltage output (1 port for AC test instrument and 2 ports for AC/DC test instrument)
- (7) GND: connect with one port of the tested

- (8) “OVER LEAK. ” indicator: “OVER LEAK.” Indication light and annunciate work when test current leakage exceed pre-set value, voltage output will be cut off, then press down the “REST” button and Anti-clockwisely circumvolve “V-ADJ” rotary switch to the maximum to be ready for next test operation.
- (9) “VOLTAGE” meter: Three bits digital voltage meter, indicate output voltage value:
- (11) “ CURRENT ” meter: 3 1/2 digital current meter, indicate leakage current value
- (12) “TIMER” meter: 2 bits digital displayer, show timing value (RK2671B 3 bits digital displayer)
- (13) “TIMER” rotary switch: to adjust to set timing range
- (14) “OVER LEAK.” pre-set adjustor: Press down “PRE-SET / TEST” switch to pre-set leakage current value and display current test result
- (15) “PRESET / TEST” button: Press down to preset and or else to test
- (16) “CURRENT LEAK.” range: Test range are 0 ~ 2mA & 2 ~ 20mA.
- (17) “CURRENT LEAK.” switch: Test range is 100mA (200mA) .  
(only for RK2678 )
- (18) “TIMER / MANUAL ” button: Press down to be timing test or else to be manual test
- (19) “AC/ DC” converting button: Press down to be DC model or else to be AC model. (CAUTION: only for AC/DC instrument)
- (20) “Voltage output ” convert button: (only for RK2671&RK2678)
- (21) Power plug: AC 220V plug with inner fuse

## FRONT AND BEHIND PANEL



## V、Operation.

- (1) CONNECT POWER: Insure “V-ADJ” rotary has to be set at “0” position and then turn on power
- (2) Set “LEAK. CURRENT” value: Press down button “15”, adjust current leakage preset adjustor “14” to preset needed value
- (3) Connect test port: According to the request of tested object, connect test wire with test object well.
- (4) “TIMER”: Press timing button “17” to the “TIMER” position adjust timing rotary switch to set timing range , then press down “STARTUP” button and adjust “V-ADJ” rotary switch to needed voltage output.
- (5) “CONTRAL”: Set timing switch “18” to “manual” position, then press down “STARTUP” button.
- (6) In test process, instrument annunciator will work to when test “over leakage current” exceeded the pre-set over leakage current, then press down “RESET” button to waiting test status .  
(If take the manual control to test, the STARTUP button should be unlocked)
- (7) If test over leakage current is less than pre-set value, unless time is up or press down “RESET” button ,instrument will be in the waiting test status.
- (8) Remote controller test: Insert the five-pin plug of remote controller bar to instrument relevant plug, then press down the switch of test bar to start to test.

Caution: Timing function is no of effect when remote control function working at the same time.

Test example:

condition: test voltage AC: 3000V, max over leakage current AC: 1.5mA,  
timing rage : 30 s .

model: RK2671A voltage withstand test instrument.

steps:

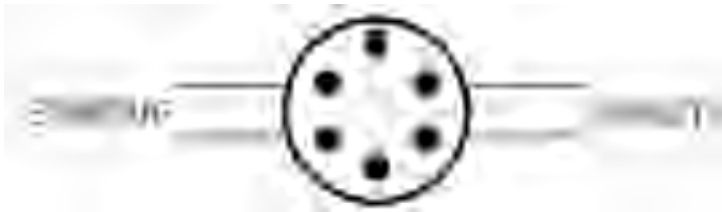
1. Check instrument's "V-ADJ" rotary switch to be the anti-clockwise end position
2. Plug power wire and then turn on power button
3. Select proper range: set voltage range at "5kV" position.
4. Select proper AC&DC voltage range: set the "AC / DC" switch at "AC" test position.
5. Select proper over leakage current range: set the over leakage current range at "2 mA" position
6. Pre-set over leakage current value: press down "over leakage current preset" switch to "PRESET" position, then adjust "over leakage current preset:" switch to 1.500 mA Insure the switch to jump up and be in "TEST" position.
7. TIMER reset: set "TIMER / MANUAL" switch to be at "TIMER" position and adjust timing rotary switch at "30" seconds range.
8. Insert HV test bar to AC voltage output port, and another black pothook connect with black GND port of instrument.
9. Connect HV test bar、GND wire and tested instrument (the style to connect is the black clamp connecting with GND port of tested power, HV port connecting with another port ( L or N). The tested must be put on insulation worktable
10. Startup to test after confirming instrument setting and connection
11. Press down "STARTUP" button, adjust "V-ADJ" rotary switch to increase voltage until voltage meter show "3.00" kV. If tested leakage current exceed pre-set value with voltage upgrading, annunciator will indicate and voltage output stop, it means the tested is not passed , press down "RESET" button to recover to origin status, or instrument will



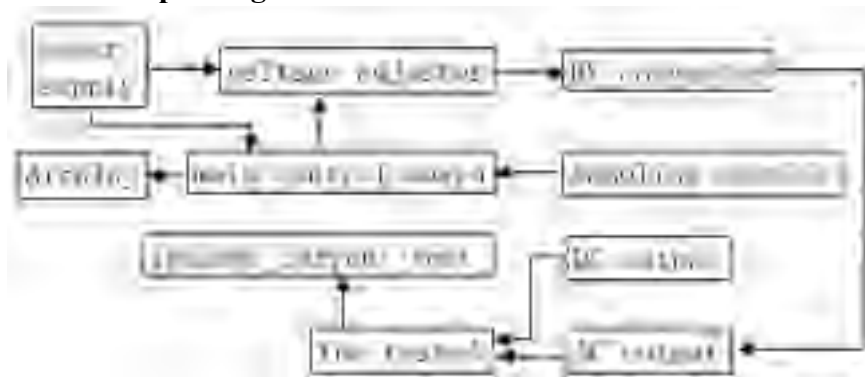
reset automatically when leakage current is under the pre-set value .

12. “REMOTE” mode operation: insert the aviation five-pin plug of test bar to remote test port, press down the switch of test bar all time to start test, then release to reset . Instrument will automatically reset if over leakage current take place.

13. CAUTION: Timer is disabled if test bar is working ,it is also same to use out-control instrument’ self-service brake switch .。



## VI. Principle diagram.



## VII、 Others.

- |                 |         |
|-----------------|---------|
| (1) test wire   | 1 piece |
| (2) user manual | 1 piece |
| (3) certificate | 1 sheet |
| (4) dust shield | 1 piece |